

**UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF VIRGINIA  
ALEXANDRIA DIVISION**

<hr/>	)	
<b>CELLEBRITE MOBILE</b>	)	
<b>SYNCHRONIZATION LTD., and</b>	)	
<b>CELLEBRITE USA, INC.</b>	)	<b>Civil Action No. 13-CV-1014 (TSE/TRJ)</b>
	)	
<b>Plaintiffs,</b>	)	<b>THIRD EXPERT DECLARATION OF</b>
	)	<b>ROBERT ZEIDMAN</b>
<b>v.</b>	)	
	)	
<b>MICRO SYSTEMATION AB, and</b>	)	
<b>MSAB, INC.,</b>	)	
	)	
<b>Defendants.</b>	)	
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I, Robert Zeidman, provide the following expert disclosures.

**I. SUMMARY OF FINDINGS**

1. I have reviewed the Plaintiff's First Request for Production of Documents to Defendants, which was submitted by Cellebrite Mobile Synchronization Ltd. ("Cellebrite") on September 16, 2013, and the documents provided by Micro Systemation AB and MSAB, Inc. ("MSAB"). I find that MASB has not complied with Cellebrite's document requests. MSAB has not provided all versions of XRY software code, the software repository, ancillary files, and other source code files. These omissions hinder my ability to perform a complete analysis.

**II. SCOPE OF REPORT**

2. Based on my background and experience, I have been asked by the law firm of Pearl Cohen Zedek Latzer Baratz LLP, on behalf of Cellebrite Mobile Synchronization Ltd. ("Cellebrite"), to provide my opinions and conclusions related to whether Micro Systemation AB and MSAB, Inc. ("MSAB") complied with the Plaintiff's First Request for Production of Documents to Defendants.
3. In reaching the opinions and conclusions discussed herein, I received, considered, and/or relied upon the following materials:
  - 1) Plaintiff's First Request for Production of Documents to Defendants, dated 9/16/2013
  - 2) Declaration of Orjan Gatu in Opposition to Application for a Temporary Restraining Order, filed 8/22/2013.
  - 3) Expert Declaration of Robert Zeidman, dated 8/15/2013
  - 4) First MSAB XRY Source Production, received on 10/24/2013
  - 5) Second MSAB XRY Source Production, received on 11/07/2013
  - 6) "MSAB XRY 6.3 Release Notes," MSAB Downloads,

[http://www.msab.com/app-data/downloads/Release\\_Notes\\_\(English\)/XRY\\_release\\_notes\\_6.3\\_EN.pdf](http://www.msab.com/app-data/downloads/Release_Notes_(English)/XRY_release_notes_6.3_EN.pdf),

retrieved on 11/11/2013

### **III. INSUFFICIENT PRODUCTION OF MATERIALS**

4. I have reviewed the documents provided by MSAB. I find that the production is insufficient and does not comply with Cellebrite's document request.

#### **A. VERSIONS OF XRY SOFTWARE OMITTED**

5. Cellebrite's document request covers the period from January 1, 2011 through the present and specifically asked for all versions of the XRY Software solutions for physical extraction of Samsung mobile devices based upon the Qualcomm chip set and all versions of the XRY Software solutions for physical extraction of BlackBerry mobile devices during that period. However, the earliest version number associated with the MSAB production is version 6.3. This is the earliest version number found in the directory names that MSAB provided. Version 6.3 of the MSAB XRY software was released on May 28, 2012 according to the XRY 6.3 release notes, attached as Exhibit A. Therefore, MSAB has omitted over a year of documents and source code prior to version 6.3. These early documents are critical, because signs of copying in early versions of software may not be evident in later versions.
6. For example, Gatu in his declaration discusses the SGH-800 configuration file. In my declaration dated August 15, 2013, I found that this configuration file was called SGH-G800.txt and that it includes Cellebrite parameters, Cellebrite commands, and even the name "Cellebrite." According to Gatu, this file was added to MSAB's version control system on May 19, 2011. I need access to the version control system to verify the development history of the SGH-800 configuration file, as discussed below. The existence of this configuration file in early 2011 indicates that MSAB was utilizing Cellebrite

materials prior to the software source code that MSAB provided.

7. Furthermore, MSAB appears to have only provided files from production versions of their source code. The directory names of the provided source code correspond to official releases of the MSAB XRY software. The omission of both source code leading up to these production versions as well as intermediate versions of the source code hinders my ability to perform a complete analysis.

**B. SOFTWARE REPOSITORY OMITTED**

8. The MSAB production also omitted the version control system, also known as a source code repository, that would contain all versions of MSAB source code including release version and intermediate versions. Cellebrite specifically requested the MSAB source code repository. A version control system includes valuable metadata related to the software development process and procedures as well as which software developers were involved with which files and on which dates and times. Access to the version control system is needed to understand the development history of the XRY software. The omission of the source code repository hinders my ability to perform a complete analysis.

**C. ANCILLARY FILES OMITTED**

9. The MSAB production also omitted ancillary files such as project files, make files, header files, and third-party library code that provide information about how the software is built and indicate whether I have a complete set of source code files. Cellebrite specifically requested the MSAB ancillary files. As discussed above, MSAB omitted configuration files such as the `SGH-G800.txt` configuration file that was referenced in Gatu's declaration. The omission of the ancillary files hinders my ability to perform a complete analysis.

**D. OTHER SOURCE CODE FILES WERE OMITTED OR HAD PROBLEMS**

10. The source code that MSAB did produce also included several significant omissions. The produced files appear to be a subset of a larger body of MSAB source code:

- 1) The produced files were not provided in their regular directory structure. The produced files were separated into several directories, where each directory was labeled with a project name and a version number. Each directory included source code files organized without subdirectories. Eight of these directories also included project files. Each project file included an expected directory structure, including various subdirectories for the source code of the associated project. The arrangement of the source code files did not match the directory structure that was shown in the project files. This means that analyzing them and even determining whether all files were produced is unnecessarily difficult if not impossible.
- 2) The produced files also included references to critical source code files that were omitted. The eight project files included references to source code files, which were not provided. Some of the source code files also contained `include` statements that reference files that were not provided. A list of the files that I was able to identify as missing from the source code production is shown in Exhibit B. Where header files have been omitted, there may be associated source code files that are not identified by `include` statements. Further, these omitted files may reference still other files that have been omitted. The list in Exhibit B may therefore not be an exhaustive list of what MSAB has omitted. Again, without being provided entire projects directories analyzing the files and even determining whether all files were produced is unnecessarily difficult if not impossible.
- 3) The files `..\Qualcomm Dumper (PC side) 6.3\QCDmpModule.cpp` and `..\Qualcomm Dumper (PC Side) 6.4\QCDmpModule.cpp` include references to a directory called `D:\Cellebrite Physical\`. However, MSAB omitted this directory in its production.
- 4) The file `..\Blackberry Dumper (PC Side) 6.5\blackberryPatcher.cpp` appears to be corrupted because it consists of all zeros instead of source code.

11. The omission of these source code files hinders my ability to perform a complete analysis.

#### **IV. CONCLUSION**

12. MASB has not complied with Cellebrite's document requests. MSAB has not provided all versions of XRY software code relating to solutions for physical extraction of Samsung mobile devices based upon the Qualcomm chip set and solutions for physical extraction of BlackBerry mobile devices, the software repository, ancillary files, and other source code files. These omissions hinder my ability to perform a complete analysis.

Dated: November 14, 2013



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Robert Zeidman

**Exhibit A: XRY Release Notes 6.3**

CONFIDENTIAL



**Exhibit B: Omitted Files from Second Production**

CONFIDENTIAL

## **EXHIBIT A**

RELEASE DATE: W/C 28<sup>TH</sup> MAY 2012

XRY

# XRY 6.3

## RELEASE NOTES

NOW WITH  
**7,323**  
DEVICE PROFILES  
SUPPORTED

## SAMSUNG KIES BACKUP FILE SUPPORT

In XRY v6.3 you now have the ability to import backup files from Samsung handsets using the Kies system. Samsung Kies is the equivalent to the iTunes Backup for iOS devices and the IPD file for Blackberry devices which we already support.

With this new .sbu backupfile decoding functionality you can decode backup files created by Samsung's sync-program Kies from the Galaxy S2 for example.

So whilst you may not be able to secure the handset itself, you can still recover data from an image of the device when it was last sync'd with the owner's computer.



## iOS KEYCHAIN PASSWORD DECODING

With v6.3 you now have the ability to recover email passwords and un-encoded apps passwords from iOS devices. The keychain database contains sensitive information about email and application accounts and passwords.

Decryption of the keychain database on Apple devices makes it possible to see passwords for email accounts added to the device. Some apps that use the encryption of the keychain database don't encrypt their passwords themselves, which means that we can also decrypt those passwords as well. Other applications may protect their passwords further; and we will work on the ability to decrypt them in the future.



### WHAT'S NEW IN THIS RELEASE? ▼

- >> New agent for extracting data from **Windows Phone 7**
- >> **Samsung Kies**  
Support for importing and decoding .sbu backup files
- >> **iPhone**  
Keychain Passwords Support  
Logical Application Decoding
- >> **Motorola iDEN**  
Decoding support
- >> **Blackberry**  
Improved IPD decoding & BBM extraction
- >> **New Field Versions**  
XRW & CF-19
- >> **New Service Cables**

### MAIN APPLICATION IMPROVEMENTS ▼

- >> **Smartphone Apps** – Logical decoding functionality
- >> **Watch List** – Hit numbers now displayed on Category Folder level
- >> **SQLite Viewer** – Now possible to have multiple viewers open simultaneously
- >> **XML & Plist Viewers** – You can now launch these files direct from the details window
- >> Opening/Reading XRY file progress bar
- >> Resolved issue with picture metadata for the GPX & Google Earth exporters

Forensic Method	v6.3	Total
>> XRY Logical	224	3,542
>> XRY Physical Dumping	105	1,427
>> XRY Physical Decoding	196	1,253
>> Security Code Only	140	524
>> Smartphone Apps	24	89
>> XRY Untested	42	488
>> <b>Total</b>	<b>731</b>	<b>7,323</b>

## HARDWARE UPDATE

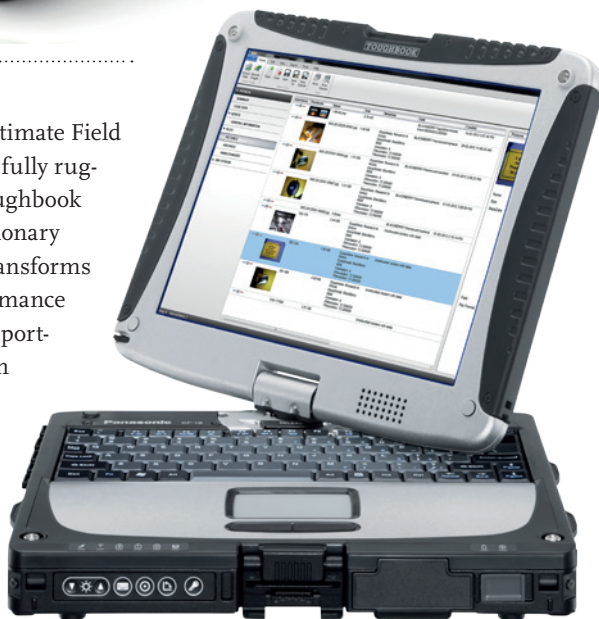
## NEW FIELD VERSIONS

Introducing XRW and CF-19 – both devices meet the tough Field Version specifications of MIL-STD – 810G and IP65 compliance. These two units are our next generation of Field Versions: The XRW computer is an ultra-rugged mobile 10-inch widescreen Notebook running Microsoft Windows 7 Ultimate operating system and features an Intel Atom 2.0 GHz processor with 64GB Solid State hard drive and 2GB of DDR2 RAM. Portability combined with a full keyboard – this tough and light weight unit is the perfect all-round solution for users on a budget.

The lightweight rugged XRW Notebook for users on a budget.



The CF-19 is the ultimate Field Version solution; a fully rugged convertible Toughbook featuring a revolutionary LCD screen that transforms from a high-performance notebook to a fully portable tablet PC. With an Intel® Core™ i5 processor delivering high performance with a 320GB HDD and 4GB RAM. This top end device has a high-power battery allowing for a running time of up to 9 hours and a magnesium alloy case.



The ultimate rugged solution; CF-19 notebook and tablet PC with core i5 processor.

For more details please contact [sales@msab.com](mailto:sales@msab.com)

## DID YOU KNOW?

APPLE iOS  
PHYSICAL SUPPORT

Have you applied for a special update?

You need to update your license key. Physical support for Apple devices like Security Lock Bypass and Dumping and Decryption won't work without you adding a special update to your Codemeter license key.

This new separate element is required to be installed on your key before the system will work. [www.msab.com/support/export-controls-for-xry-v6.2](http://www.msab.com/support/export-controls-for-xry-v6.2)

ANDROID DUMPING  
WITHOUT THE NEED  
FOR ROOTING

We now support for several Qualcomm based LG Android devices. One of the benefits of these phones is that they can be dumped and decoded directly without the need for automatic rooting. Allowing you to get around the Swipe/ Gesture Lock Patterns: *LG VS660 Vortex, LG LS670 Optimus S, LG US670 Optimus U, LG VM670 Optimus V, LG MS690 Optimus M, LG VS-700 Enlighten, LG AS-740 Axis, LG US740 Apex, LG VS740 Ally, LG US760 Genesis.*





## WINDOWS PHONE 7 SUPPORT

In this release we have introduced limited support for extraction of some Windows Phone 7 handsets; the solution is complex but will benefit users considerably when dealing with this Smartphone operating system. Support can extend to extraction of Contacts, Calendar, SMS and File. Check the device manual for full details.



## SMARTPHONE APPS SUPPORT

Just a quick re-cap on recent development work we have been doing for you for apps support:

XRY	v6.1	v6.2	v6.3
>> BlackBerry	5	5	8
>> Android	14	21	37
>> Apple	35	39	44

Apps support is just as difficult as device support and the software versions of apps change regularly, so not only do we have to try to support new apps, we also have to go back and check new versions of existing apps to make sure they continue to work!

## LOGICAL APPLICATION DECODING



We've separated the process of data file extraction and the parsing of the data on Smartphones and CDMA mobile devices. The decoding process now takes place after the initial extraction of the file system. Thus it is now possible to re-decode these new XRY files and apply decoding again as our support ability improves in the future.

## SERVICE CABLES

We know that a lot of experienced phone examiners already have their own sets of service cables which they use alongside XRY. We have been able to extend XRY support by documenting the ability to recover more data through the use of these service cables.

Equally we regularly receive enquiries from new customers who are confused about the use of such cables and their availability; in order to assist them with device extraction.

Historically we pointed customers in the direction of third party suppliers. With the release of v6.3 however, we have decided to offer these cables direct in order to improve our customer support. We have put together a select list of recommended service cables needed in order to extend support on mobile devices.

This Service Cable pack is available to purchase through our web shop via the customer portal.



### XRY COMPLETE EXTRACTION FEATURES

#### >> Android

- New Apps: Desk Notes, Dropbox, Evernote, Facebook, Facebook Messenger, Fring, Google Maps, Hide it Pro (Audio Manager), Me2Day, Daum MyPeople, Navfree, NAVIGON MobileNavigator, Sygic, TomTom Places, VBrowser, Voxer

#### >> iPhone

- New Apps: Evernote, Mappy, Maps+, Navfree GPS Live, Voxer



### XRY LOGICAL FEATURES

#### >> 32 new CDMA devices

#### >> New agent for extracting data from Windows Phone 7

>> Separated file extraction and decoding of data on Smartphones and CDMA. Decoding now takes place after the extraction of the file system.

#### >> BlackBerry

- New Apps: Google Talk, Windows Live Messenger, Yahoo! Messenger
- Improved extraction of "BlackBerry Messenger" BBM app for conversations



### XRY PHYSICAL FEATURES

#### >> 40 new GPS devices

#### >> iPhone 3G physical support without the need for jailbreaking

>> Decryption of data in iOS keychain database to recover passwords

#### >> Decoding support for Motorola iDEN

#### >> Decoding support for an additional 30+ CDMA models

>> Decoding of contacts, calls, SMS and MMS on 40+ china phones

#### >> Support for importing and decoding Samsung Kies Backup files

#### >> Improved CDMA decoding

#### >> BlackBerry IPD decoding

- Web browser bookmarks
- Displaying calendar event attendees

### NEW CABLES IN XRY LOGICAL AND PHYSICAL

#### >> Samsung Cable 17



## NEW DEVICES IN XRY LOGICAL

<b>Ace</b> Cali TV Caracas Pro	<b>Clarion</b> EZD580 Map 360	<b>Huawei</b> G6600 Passport	<b>MLS Destinator</b> 84F-3	<b>Next</b> YE-G 545 YE-GA 4624
<b>Acer</b> M310 Allegro W4	<b>Dell</b> Venue Pro V02S	<b>i-mobile</b> Hitz 254 Swap Hitz 317	<b>Motorola</b> EX124g i30sx i315 i325 i365 i365is i412 i576 i58sr i605 i615 i686 Brute i690 i706 i733 i786 i786w i850 i856w i857 i85s i867 i875 i876 i876w i877 Pininfarina i890 i897 Ferrari Edition i9 Stature MB865 Atrix 2 ME511 FlipOut XT530 Fire XT XT532 XT615 XT860 Milestone 3 XT912 Droid Razr Maxx ZN4 Krave	<b>Nextar</b> 43LT
<b>Aladdin</b> A89	<b>Dopod</b> S700*	<b>Initial</b> GM-510		<b>No Brand</b> 5.0 MediaTek 7.0 Slim HiFast HD GPS-538
<b>Alcatel</b> OT-981 OT-990 Playboy B01A	<b>E-TEN</b> InfoTouch M600*	<b>Invin</b> 3NAV-V1 GPS-3V906-IUS		<b>Nokia</b> 1616-2c 1681 classic (RH-118)* 2280 3500b classic 3555 (RM-270)* 5132 XpressMusic* 6555c (RM-276)* 6670b (RH-68)* 6800b* 700 Zeta (RM-670)* 701 (RM-774)* 7212 Supernova (RM-436)* 7610b (RH-52)* Asha 200 (RM-761)* Asha 300 (RM-781)* Asha 302 (RM-813)* Asha 303 (RM-763)* Lumia 800
<b>Amcor</b> 3900	<b>Fine Digital</b> FineDrive 350	<b>Jensen</b> NVX225		
<b>Amoi</b> E850*	<b>Garmin</b> Montana 600 Montana 650t Rino 650	<b>kpn</b> Messenger*		
<b>Apple</b> iPad 3 4G CDMA (A1403) iPad 3 4G GSM (A1430) iPad 3 Wi-Fi (A1416)	<b>General Mobile</b> Diamond Bar Diamond Qwerty Fox Ultimate Slim	<b>Kyocera</b> E2000 Tempo K322 K323 KX160b KX444 KX9c Milan* Lingo M1000 S1350 Presto		
<b>Asus</b> P735* TF101 Eee Pad Transformer	<b>Gigabyte</b> GSmart i120*	<b>LG</b> AS-740 Axis C330 E730 Optimus Sol E906 Jil Sander GR700 Vu Plus KG320 LN505 LN730 LN735 LN740 MG800d Chocolate UN270 Attune US760 Genesis VN150 Revere VN251 Cosmos II VS700 Enlighten – Eclipse		
<b>Audiovox</b> CDM-8930	<b>G-net</b> G205 G534		<b>MyGuide</b> PND 4328 Typhoon 3500 GO	<b>Nortech</b> E-GPS010
<b>Aviton</b> AZ281MA AZ291MA AZ391MA	<b>GoldMaster</b> NAV-432			<b>oblio</b> Nav Max 7
<b>Axion</b> GEO-632	<b>Gresso</b> Royal Black Diamonds*			<b>Omnitech</b> 16878-US
<b>BenQ</b> E72*	<b>HKC</b> G1000*			<b>Orange</b> Sydney
<b>BLU</b> Studio 5.3 D500* Studio 5.3 D510	<b>HP</b> iPAQ 600*			<b>Packard Bell</b> Compassee 300 Compassee 500 Compassee 620
<b>Blue Media</b> BM-6500	<b>HTC</b> 7 Pro (PC93100) EVO 3D (X515m) (PG86300) Flyer P510e HD7S T9295 (PD29150) P3000* P4351* Radar C110e Rezound ADR6425 Sensation XL Beats Audio X315e	<b>Mappy</b> ulti 507 ulti 509	<b>Navigon</b> 2100 3100 5100 7000t 7100 PNA-6000T	<b>PC MILER</b> PCM430 PCM440 PCM450 PCM540
<b>Bryton</b> Rider 50		<b>Maylong</b> ML-405	<b>Navitech</b> QX-353	
<b>China Clones</b> iGo Amigo Q10 (3 SIM) UFX 501*		<b>Medion</b> MDPNA 200s	<b>NDrive</b> TouchXL SE	
		<b>Mio</b> Spirit 578		





## NEW DEVICES IN XRY LOGICAL

**PCD**

CDM-8635

**Pharos**

PDR-250n

**Pioneer**

AVIC-S1

AVIC-S2

**Piranha**

Avatar

**ProNav**

PNN200

**Proximus**

Global GPS Tracker

**QiGi**

T900\*

Qstarz

CR-Q1100P

**Rand McNally**

IntelliRoute TND-500

**RightWay**

RW355

RW400

RW550

**RIM**

BlackBerry 9380 Curve Touch

BlackBerry 9630 Curve

BlackBerry 9850 Torch

**Riptunes**

MP-1527

**RoyalTek**

RN2BF

**RYDEEN**

VMAX 303

**Sagem**

my300c

**Samsung**

GT-C3010s

GT-C3011

GT-C3750 Metro

GT-E1180

GT-E1232b Duos

GT-E3213k Hero

GT-i8350 Omnia W

GT-N7000 Galaxy Note

GT-S5263 Star II Touch

GT-S5610k Primo

GT-S5690L Galaxy

Xcover

GT-S5780 Wave 578 NFC

SCH-i515 Galaxy Nexus

SCH-R310 Byline

SCH-W899 Anycall

SCH-W999 Anycall

SGH-A516

SGH-C225

SGH-C450

SGH-D888 Duos Anycall

SGH-E860V

SGH-F700

SGH-i677 Focus Flash

SGH-i777 Galaxy S II

SGH-i937 Focus S

SGH-T139

SHW-M190 Galaxy S

Hoppin

SHW-M250L Galaxy S II

SPH-A640 (Bell)

SPH-M810 Instinct S30

YP-G70 Galaxy S WiFi

5.0 8GB

**SKG**

M-222

**SoftBank**

001DL

**Sony**

GPS-CS1

GPS-CS3

NV-U70t

**Sony Ericsson**

Mix Walkman (WT13a)\*

Mix Walkman (WT13i)

Mix Walkman (WT19i)

Txt (CK13a)\*

Txt (CK13i)

Txt Pro (CK15a)

Xperia Active (ST17a)

Xperia Active (ST17i)

Xperia mini (ST15a)\*

Xperia mini pro (SK17a)\*

Xperia Neo (MT15a)\*

Xperia Pro (MK16a)

Xperia X8 (E15a)\*

Z780i

**Spice**

M-6800 Flo

**Sylvania**

SGPD432

**Takara**

GP7-o

**Targa**

PNA-E3520T

**TCL**

i880\*

Q3\*

**T-Mobile**

Affinity\*

**Transonic**

PNA-6000T

**Transsystem Inc**

TripMate 850

**Trimble**

Juno SC\*

**UTStarcom**

CDM-7076

CDM-8630AL Alltel

CDM-8960CE

**V7**

NAV730

**WayteQ**

X5\*

**WIKO**

Minimi

**Windows Phone**

Windows Phone

Generic 1

Windows Phone

Generic 2

**ZTE**

N295\*

Tania

\*Untested devices



The Galaxy Note is also added to our support list with this release.



The new iPad 3 is now supported logically in XRY v6.3.





## NEW DEVICES IN XRY PHYSICAL DUMPING

<b>Aladdin</b> A89	<b>Invision</b> 3NAV-V1	<b>Nextar</b> 43LT	<b>RYDEEN</b> VMAX 303	SGH-Z560 SHW-M190 Galaxy S Hoppin YP-G70 Galaxy S WiFi 5.0 8GB
<b>Alcatel</b> OT-981 OT-990	<b>LG</b> AS-740 Axis US760 Genesis VM670 Optimus V VS700 Enlighten - Eclipse	<b>No Brand</b> 7.0 Slim HiFast HD GPS-538	<b>Samsung</b> GT-C3010s GT-E2121L GT-E2210 GT-M7500 Emporio Armani GT-N7000 Galaxy Note GT-S7220 Ultra b GT-S7350 Ultra s GT-S8300 Ultra Touch SCH-R260 Chrono SCH-W289 SCH-W589 AnyCall SCH-W799 AnyCall SCH-W899 AnyCall SGH-A637 SGH-A707 Sync SGH-A717 SGH-A727 SGH-A737 SGH-A747 SLM SGH-A777 SGH-A827 Access SGH-A837 Rugby SGH-A886 Forever SGH-A887 Solstice SGH-A927 Flight II SGH-F490 SGH-F490v SGH-L170 SGH-L760 SGH-T469 Gravity 2 SGH-T639 SGH-T746 Impact SGH-U900 Soul	<b>SKG</b> M-222
<b>BLU</b> Studio 5.3 D510	<b>Mappy</b> ulti 507 ulti 509	<b>oblio</b> Nav Max 7		<b>Sony</b> GPS-CS1 GPS-CS3
<b>Bryton</b> Rider 50	<b>Mio</b> Spirit 578	<b>PC MILER</b> PCM440 PCM450 PCM540		<b>Sony Ericsson</b> Mix Walkman (WT13i) Mix Walkman (WT19i) T250a Txt (CK13i) Txt Pro (CK15a) Txt Pro (CK15i) W150i Yendo W8i Walkman (E16i) Xperia Active (ST17a) Xperia Active (ST17i)
<b>China Clones</b> iGo Amigo	<b>Motorola</b> i325 i440 i856 Debut i857 MB865 Atrix 2 XT860 Milestone 3 XT912 Droid Razr Maxx	<b>Pharos</b> PDR-250n		<b>Sylvania</b> SGPD432
<b>Clarion</b> EZD580	<b>MyGuide</b> PND 4328	<b>Piranha</b> Avatar		<b>Targa</b> PNA-E3520T
<b>Garmin</b> Montana 600 Montana 650t Rino 650	<b>Navigon</b> 2100 5100 7100	<b>ProNav</b> PNN200		<b>Transystem Inc</b> TripMate 850
<b>General Mobile</b> Fox Ultimate Slim	<b>Navitech</b> QX-353	<b>Proximus</b> Global GPS Tracker		<b>V7</b> NAV730
<b>GoldMaster</b> NAV-432	<b>Next</b> YE-G 545	<b>Rand McNally</b> IntelliRoute TND-500		
<b>Google</b> Nexus S (GT-i9020)		<b>RightWay</b> RW400 RW550		
<b>HTC</b> Sensation XL Beats Audio X315e		<b>Riptunes</b> MP-1527		

XRY now supports a huge variety of GPS devices from 75 different manufacturers.



XRY supports Motorola iDEN devices. Did you know you can dump and decode a locked iDEN device and recover the security code?





## NEW DEVICES IN XRY PHYSICAL DECODING

<b>Aladdin</b> A89	VN250 Cosmos VS700 Enlighten _ Eclipse	i776 i776w i80s	<b>ProNav</b> PNN200	SGH-F480v Touchwiz SGH-F490 SGH-F490v
<b>Alcatel</b> OT-981 OT-990	VX5600 Accolade VX7100 Glance VX8360 VX8370	i830 i833 i836 i850	<b>Proximus</b> Global GPS Tracker	SGH-L170 SGH-L760 SGH-T469 Gravity 2
<b>BLU</b> Studio 5.3 D510	VX8560 Chocolate 3 VX9200 enV3	i855 i856 Debut i856w	<b>Rand McNally</b> IntelliRoute TND-500	SGH-T639 SGH-T746 Impact SGH-U900 Soul SGH-Z560
<b>Bryton</b> Rider 50	<b>Mappy</b> ulti 507 ulti 509	i857 i85s i860 i870	<b>RightWay</b> RW400 RW550	SHW-M190 Galaxy S Hoppin SPH-M810 Instinct S30
<b>China Clones</b> iGo Amigo	<b>Mio</b> Spirit 578	i875 i880 i885	<b>Riptunes</b> MP-1527	YP-G70 Galaxy S WiFi 5.0 8GB
<b>Clarion</b> EZD580	<b>Motorola</b> i205 i265 i275 i285 i290 i296 i305 i30sx i315 i325 i325is i335 i355 i35s i365 i365is	i90c i95cl MB865 Atrix 2 XT860 Milestone 3 XT912 Droid Razr Maxx	<b>RYDEEN</b> VMAX 303	<b>SKG</b> M-222
<b>Garmin</b> Montana 600 Montana 650t Rino 650	i315 i325 i335 i355 i35s i365 i365is		<b>Samsung</b> GT-C3010s GT-E2121L GT-E2210 GT-E2370 Xcover GT-M7500 Emporio Armani GT-N7000 Galaxy Note GT-S7220 Ultra b GT-S7350 Ultra s GT-S8300 Ultra Touch Kies Backup SCH-R460 MyShot II SCH-R470 TwoStep SCH-R550 JetSet SCH-R560 Messenger II SCH-R850 Caliber SCH-R860 Caliber SCH-U490 Trance SCH-U750 Alias 2 SCH-W289 SCH-W589 AnyCall SCH-W799 AnyCall SCH-W899 AnyCall SGH-A597 Eternity 2 SGH-A637 SGH-A707 Sync SGH-A717 SGH-A727 SGH-A737 SGH-A747 SLM SGH-A777 SGH-A827 Access SGH-A837 Rugby SGH-A867 Eternity SGH-A886 Forever SGH-A887 Solstice SGH-A897 Mythic SGH-A927 Flight II SGH-F480 Touchwiz	<b>Sony</b> GPS-CS1 GPS-CS3
<b>General Mobile</b> Fox Ultimate Slim	i315 i325 i335 i355 i35s i365 i365is	<b>MyGuide</b> PND 4328		<b>Sony Ericsson</b> Mix Walkman (WT13i) Mix Walkman (WT19i) Txt (CK13i) Txt Pro (CK15a) Txt Pro (CK15i) W150i Yendo W8i Walkman (E16i) Xperia Active (ST17a) Xperia Active (ST17i)
<b>GoldMaster</b> NAV-432	i410 i412 i415 i425 i440 i450 i455 i465 Clutch i50sx i530 i560 i570 i576 i580 i58sr i605 i60c i670 i690 i706 i710 i730 i733 i736 i760	<b>Navigon</b> 2100 5100 7100		<b>Sylvania</b> SGPD432
<b>Google</b> Nexus S (GT-i9020)		<b>Navitech</b> QX-353		<b>Targa</b> PNA-E3520T
<b>HTC</b> Sensation XL Beats Audio X315e		<b>Next</b> YE-G 545		<b>Transystem Inc</b> TripMate 850
<b>Invin</b> 3NAV-V1		<b>Nextar</b> 43LT		<b>V7</b> NAV730
<b>LG</b> 230 Nite 370 Force AN430 Wine II AS-740 Axis AX265 Banther AX310 AX500 Swift AX585 Rhythm AX8370 LX265 Rumor 2 LX290 LX370 MN180 Select MT310 Helix MT375 Lyric US760 Genesis VM670 Optimus V		<b>No Brand</b> 7.0 Slim HiFast HD GPS-538		
		<b>oblio</b> Nav Max 7		
		<b>PC MILER</b> PCM440 PCM450 PCM540		
		<b>Pharos</b> PDR-250n		
		<b>Piranha</b> Avatar		



## NEW DEVICES IN XRY SECURITY CODES

**Audiovox**

CDM-8930

**Casio**

C211 GzOne type S

C511 GzOne type V

C711 GzOne Boulder

**Kyocera**

E2000 Tempo

K322

K323

KX160b

KX444

Laylo M1400

Lingo M1000

Neo E1100

S1350 Presto

S2300 Torino – Loft

SE44

SE47

**LG**

AX275

AX355

AX390

DM-L200

LX400

PM325

UN270 Attune

VN150 Revere

VN251 Cosmos II

VX3400

VX3450

VX3450L

VX4650

VX4700

VX5400

VX7000

VX8100

VX8500 Chocolate

VX8550 Chocolate

VX8575 Chocolate Touch

VX8600

VX8610 Decoy

VX8800 Venus

VX9100 enV2

VX9200 enV3

VX9800 V

**Motorola**

ic502 Buzz

ic602 Buzz

V323i

V325xi

V860 Barrage

VE240

ZN4 Krave

**Nokia**

1616-2c

2610b

2690

3109 classic

3120 classic

5700 XpressMusic

6151

6233

6280

6315i

6700 classic Gold Edition

6750-1b Mural

7205 Intrigue

7370

C1-01

C3-00

N81-1 8GB

N95-1

N95-2 8GB

X3-02 Touch and Type

**PCD**

CDM-8635

**Samsung**

GT-E1110

GT-E1117L Guru

GT-E2510

GT-M7500 Emporio

Armani

GT-S3100 Croy

GT-S5320

GT-S5630c

GT-S8500 Wave

SCH-A890

SCH-A930

SCH-A950

SCH-A970

SCH-A990

SCH-R100 Stunt

SCH-R250 Contour

SCH-R310 Byline

SCH-R311 Axle

SCH-R350 Freeform

SCH-R351 Freeform

Link

SCH-R420 Tint

SCH-R460 MyShot II

SCH-R470 TwoStep

SCH-R500 Hue

SCH-R520 Trill

SCH-R560 Messenger II

SCH-R600 Hue II

SCH-U340

SCH-U360 Gusto

SCH-U440 Gloss

SCH-U490 Trance

SCH-U750 Alias 2

SCH-U820 Reality

SCH-U960 Rogue

SGH-A516

SGH-A837 Rugby

SGH-A847 Rugby II

SGH-D888 Duos Anycall

SGH-D980

SGH-E251

SGH-F700

SGH-G600

SGH-G800

SGH-J200

SGH-J700i

SGH-J700v

SGH-L700

SGH-M150

SGH-M200

SGH-M610

SGH-T249

SGH-T255G

SGH-T339

SGH-T469 Gravity 2

SGH-T659 Scarlet

SGH-T929 Memoir

SGH-U800 Soul b

SGH-U900 Soul

SGH-Z240

SPH-A640 (Bell)

SPH-A920

SPH-M560 Reclaim

SPH-M630 Highnote

SPH-M810 Instinct S30

**Sanyo**

SCP-7400

**Telstra**

T6

T7 EasyTouch Discovery

**UTStarcom**

CDM-7076

CDM-8630AL Alltel

CDM-8960CE

**ZTE**

F102i



XRY supports hundreds of different chinese manufactured mobile devices from official manufacturers like Huawei; as well as many clone type devices.

**Don't forget to register your license.**

By registering your license you ensure that you receive new information about XRY software updates and new cables free of charge:  
[www.msab.com/licreg](http://www.msab.com/licreg)

## **EXHIBIT B**

## **Exhibit B: Omitted Files from Second XRY Source Production**

This is a list of files that were not included in the second XRY Source Production. These files names and paths were found in include statements.

### ***Qualcomm Dumper 6.3***

```
1. ../../Common/Misc/mutex.hpp
2. Serial.h
3. IrDA.h
4. Bluetooth.h
5. ..\Misc\Transport.h
6. SFMT-params.h
7. XFmtEnc.cs
8. XFmtClass.cs
9. XFmt.cs
10.   XTypedNum.cs
11.   XPhrase.cs
12.   XNodeId.cs
13.   XPropClass.cs
14.   XPropType.cs
```

### ***Qualcomm Dumper 6.4***

```
1. ../../Common/Misc/mutex.hpp
2. Serial.h
3. IrDA.h
4. Bluetooth.h
5. ..\Misc\Transport.h
6. SFMT-params.h
7. XFmtEnc.cs
8. XFmtClass.cs
9. XFmt.cs
10.   XTypedNum.cs
11.   XPhrase.cs
12.   XNodeId.cs
13.   XPropClass.cs
14.   XPropType.cs
```

### ***Qualcomm Dumper 6.4.1***

```
1. ../../Common/Misc/mutex.hpp
2. Serial.h
3. IrDA.h
4. Bluetooth.h
5. ..\Misc\Transport.h
6. SFMT-params.h
7. XFmtEnc.cs
8. XFmtClass.cs
9. XFmt.cs
```

- 10. XTypedNum.cs
- 11. XPhrase.cs
- 12. XNodeId.cs
- 13. XPropClass.cs
- 14. XPropType.cs

### ***Qualcomm Dumper 6.5***

- 1. ../../Common/Misc/mutex.hpp
- 2. Serial.h
- 3. IrDA.h
- 4. Bluetooth.h
- 5. ..\Misc\Transport.h
- 6. SFMT-params.h
- 7. XFmtEnc.cs
- 8. XFmtClass.cs
- 9. XFmt.cs
- 10. XTypedNum.cs
- 11. XPhrase.cs
- 12. XNodeId.cs
- 13. XPropClass.cs
- 14. XPropType.cs

### ***Qualcomm Dumper 6.6.2***

- 1. ../../Common/Misc/mutex.hpp
- 2. Serial.h
- 3. IrDA.h
- 4. Bluetooth.h
- 5. ..\Misc\Transport.h
- 6. SFMT-params.h
- 7. XFmtEnc.cs
- 8. XFmtClass.cs
- 9. XFmt.cs
- 10. XTypedNum.cs
- 11. XPhrase.cs
- 12. XNodeId.cs
- 13. XPropClass.cs
- 14. XPropType.cs

### ***BlackBerry Dumper 6.4.1***

```
1. ..\..\Defs\Core\XRHwPortInterface.h
2. ..\..\Defs\Core\XryGuidDef.h
3. Core\XForce.h
4. Modules\GblModule.h
5. Core\XDebug.h
6. Core\XRFuncs.h
7. Core\XRDefs.h
8. Core\XryDefs.h"
9. FileFormat\XryFileIfc.h
10.      Core\DataFmtMgrIfc.h
11.      Core\XRHwPortInterface.h
12.      Core\XRParamInterface.h
13.      Core\WizPageIfc.h
14.      Modules\DumperIfc.h
```

### ***BlackBerry Dumper 6.5***

```
1. ..\..\Defs\Core\XRHwPortInterface.h
2. ..\..\Defs\Core\XryGuidDef.h
3. Core\XForce.h
4. Modules\GblModule.h
5. Core\XDebug.h
6. Core\XRFuncs.h
7. Core\XRDefs.h
8. Core\XryDefs.h"
9. FileFormat\XryFileIfc.h
10.      Core\DataFmtMgrIfc.h
11.      Core\XRHwPortInterface.h
12.      Core\XRParamInterface.h
13.      Core\WizPageIfc.h
14.      Modules\DumperIfc.h
```